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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,805	09/11/2003	Zakar Raffi Hachikian	ITW 0006 IA/41038.9/14350	5226
51635	7590	06/23/2006	EXAMINER FEELY, MICHAEL J	
DINSMORE & SHOHL LLP ONE DAYTON CENTRE, ONE SOUTH MAIN STREET SUITE 1300 DAYTON, OH 45402-2023			ART UNIT 1712	PAPER NUMBER

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,805

Applicant(s)

HACHIKIAN, ZAKAR RAFFI

Examiner

Michael J. Feely

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 44-46 is/are allowed.
- 6) ☒ Claim(s) 1,2,9,20,22,24-26,34,49,50,53 and 54 is/are rejected.
- 7) ☒ Claim(s) 3-8,10-19,21,23,27-33,35-43,47,48,51 and 52 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Pending Claims

Claims 1-54 are pending.

Previous Claim Rejections - 35 USC § 102/103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. The rejection of claims 1, 2, 9, 20, 22, 24-26, and 34 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Logan (US Pat. No. 3,892,684) has been withdrawn.

Previous Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. The rejection of claims 3-5, 7, 10, 12, 14, 17, 27-29, 31, 35, 37, 44, and 45 are under 35 U.S.C. 103(a) as being unpatentable over Logan (US Pat. No. 3,892,684) in view of Marten et al. (US Pat. No. 5,459,208) has been withdrawn.

Response to Arguments

5. Applicant's arguments with respect to the previously rejected claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102/103

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1, 2, 9, 24-26, 34, 49, 50, 53, and 54 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kye (Pub. No.: US 2004/0197563).

Regarding claims 1, 2, 9, 49, and 50, Kye discloses: (1) a two-part epoxy adhesive (Abstract) comprising: (a) a resin component comprising a mixture of epoxy resin and an internally flexibilized epoxy resin (paragraphs 0043-0048); and (b) a hardener component comprising a mixture of a flexibilizer and an unmodified or modified aliphatic amine, an

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unmodified or modified polyamide, or combinations thereof (paragraphs 0073-0108; claim 24); (2) wherein the epoxy adhesive has an initial curing time of less than 3 hours (paragraph 0125); (9) wherein said resin component is free of nonylphenol and said hardener is free of nonylphenol (*reference is silent regarding the presence of nonylphenol*); (49) wherein the flexibilizer is selected from butadiene acrylonitrile flexibilizers (paragraph 0090; claim 24); and (50) wherein the flexibilizer is selected from amine terminated butadiene acrylonitrile flexibilizers (paragraphs 0090; claim 24).

Regarding claims 24, 25, 26, 34, 53, and 54, Kye discloses: (24) the process of adhering at least two substrate surfaces to each other (Abstract; paragraphs 0118-0123) comprising: intercalating between said surfaces an adhesive comprising a reactive mixture of: (a) a resin component comprising a mixture of epoxy resin and an internally flexibilized epoxy resin (paragraphs 0043-0048); and (b) a hardener component comprising a mixture of a flexibilizer and an unmodified or modified aliphatic amine, an unmodified or modified polyamide, or combinations thereof (paragraphs 0073-0108; claim 24); (25) wherein the epoxy adhesive has an initial curing time of less than 3 hours (paragraph 0125); (26) wherein said act of intercalating includes dispensing said resin component and hardener component in equal parts by volume and mixing until the mixture is relatively homogeneous and is applied relatively evenly to the substrates (paragraphs 0118-0123); (34) wherein said resin component is free of nonylphenol and said hardener is free of nonylphenol (*reference is silent regarding the presence of nonylphenol*); (53) wherein the flexibilizer is selected from butadiene acrylonitrile flexibilizers (paragraph 0090; claim 24); and (54) wherein the flexibilizer is selected from amine terminated butadiene acrylonitrile flexibilizers (paragraphs 0090; claim 24).

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In all of the above claims, Kye fails to explicitly disclose: **(1 & 24)** wherein said cured adhesive has a tensile elongation at room temperature of greater than 30%. However, it appears that this would have been an inherent property because Kye satisfies all of the material limitations set forth in the instant claims. It has been found that, “Products of identical chemical composition can not have mutually exclusive properties.” A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present – *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Therefore, the adhesive of Kye would have inherently satisfied the instantly claimed property limitation of having a tensile elongation at room temperature of greater than 30% because it satisfies all of the chemical/material limitations of the instant claims.

Claim Rejections - 35 USC § 103

8. Claims 1, 2, 9, 20, 22, 24-26, 34, 49, 50, 53, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon (US Pat. No. 6,645,341).

Regarding claims 1, 9, 49, and 50, Gordon discloses: **(1)** a two-part epoxy adhesive (Abstract) comprising: (a) a resin component comprising a mixture of epoxy resin and an internally flexibilized epoxy resin (column 2, lines 41-64); and (b) a hardener component comprising a mixture of a flexibilizer and an unmodified or modified aliphatic amine, an unmodified or modified polyamide, or combinations thereof (column 4, lines 45-67); **(9)** wherein said resin component is free of nonylphenol and said hardener is free of nonylphenol (*reference is silent regarding the presence of nonylphenol*); **(49)** wherein the flexibilizer is selected from

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butadiene acrylonitrile flexibilizers (column 4, lines 62-67); and **(50)** wherein the flexibilizer is selected from amine terminated butadiene acrylonitrile flexibilizers (column 4, lines 62-67).

Regarding claims 24, 26, 34, 53, and 54, Gordon discloses: **(24)** the process of adhering at least two substrate surfaces to each other (Abstract; column 5, lines 33-57) comprising: intercalating between said surfaces an adhesive comprising a reactive mixture of: (a) a resin component comprising a mixture of epoxy resin and an internally flexibilized epoxy resin (column 2, lines 41-64); and (b) a hardener component comprising a mixture of a flexibilizer and an unmodified or modified aliphatic amine, an unmodified or modified polyamide, or combinations thereof (column 4, lines 45-67); **(26)** wherein said act of intercalating includes dispensing said resin component and hardener component in equal parts by volume and mixing until the mixture is relatively homogeneous and is applied relatively evenly to the substrates (column 5, lines 33-57); **(34)** wherein said resin component is free of nonylphenol and said hardener is free of nonylphenol (*reference is silent regarding the presence of nonylphenol*); **(53)** wherein the flexibilizer is selected from butadiene acrylonitrile flexibilizers (column 4, lines 62-67); and **(54)** wherein the flexibilizer is selected from amine terminated butadiene acrylonitrile flexibilizers (column 4, lines 62-67).

Gordon does explicitly disclose **(1 & 24)** a mixture of epoxy resin and an internally flexibilized epoxy resin. Rather, they disclose combinations of glycidyl ether epoxides and non-glycidyl ether epoxides (column 2, lines 41-43), wherein the non-glycidyl ether epoxides include internally flexibilized epoxy resins (column 2, lines 59-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a mixture of epoxy resin and an internally flexibilized epoxy resin in the

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composition of Gordon because Gordon uses combinations of glycidyl ether epoxides and non-glycidyl ether epoxides, wherein the non-glycidyl ether epoxides include internally flexibilized epoxy resins.

Furthermore, Gordon fails to explicitly disclose: *(1 & 24)* wherein said cured adhesive has a tensile elongation at room temperature of greater than 30%. However, it appears that this would have been an inherent property because Gordon satisfies all of the material limitations set forth in the instant claims. It has been found that, “Products of identical chemical composition can not have mutually exclusive properties.” A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present – *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Therefore, the adhesive of Gordon would have inherently satisfied the instantly claimed property limitation of having a tensile elongation at room temperature of greater than 30% because it satisfies all of the chemical/material limitations of the instant claims.

Regarding claims 2, 20, 22 and 25, Gordon fails to explicitly disclose an initial curing time of *(2 & 25)* less than 3 hours and *(20 & 22)* about 1.5-2 hours. However, the adhesive of Gordon appears to be inherently capable of satisfying this property limitation, given the proper curing conditions, because it satisfies all the chemical/material limitations of the instant invention.

Therefore, the adhesive of Gordon would have been inherently capable of having an initial cure time of less than 3 hours or from 1.5-2 hours, given the proper curing conditions, because it satisfies all the chemical/material limitations of the instant invention.

Furthermore, the adhesive of Gordon would have inherently satisfied the instantly claimed property limitation of having a tensile elongation at room temperature of greater than 120% because it satisfies all of the chemical/material limitations of the instant claims.

9. Claims 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kye (Pub. No.: US 2004/0197563).

Regarding claims 20 and 22, Kye fails to explicitly disclose an initial curing time of (20 & 22) about 1.5-2 hours. However, the adhesive of Kye appears to be inherently capable of satisfying this property limitation, given the proper curing conditions, because it satisfies all the chemical/material limitations of the instant invention.

Therefore, the adhesive of Kye would have been inherently capable of having an initial cure time of about 1.5-2 hours, given the proper curing conditions, because it satisfies all the chemical/material limitations of the instant invention.

Furthermore, the adhesive of Kye would have inherently satisfied the instantly claimed property limitation of having a tensile elongation at room temperature of greater than 120% because it satisfies all of the chemical/material limitations of the instant claims.

Allowable Subject Matter

10. Claims 44-46 are allowed.

11. Claims 3-8, 10-19, 21, 23, 27-33, 35-43, 47, 48, 51, and 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

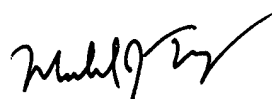
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Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael J. Feely
Primary Examiner
Art Unit 1712

June 20, 2006

MICHAEL FEELY
PRIMARY EXAMINER